PRESS RELEASE

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Opening Statement of Chairman Roscoe Bartlett
Hearing on Efficient Propulsion Systems for Navy Vessels

Washington, D.C. – Today we will receive testimony from senior Navy officials, and well-known subject matter experts about the Navy's plan for integration of energy efficient propulsion systems into future navy vessels. The subcommittee will also receive testimony from Naval Sea Systems Command on the status of the Navy's report on alternative propulsion methods for surface combatants and amphibious warfare ships, required by section 130 of the fiscal year 2006 National Defense Authorization Act.

President Bush in his 2006 State of the Union Address stated, and I quote, "Keeping America competitive requires affordable energy, and here is where we have a serious problem… America is addicted to oil… the best way to break through this addiction is through technology", end quote.

A September 2005 Army Corps of Engineers report titled, "Energy Trends and Their Implications for U.S. Army Installations" summarized national and global energy issues for the U.S. Army.

A December 2005 memorandum from Secretary Rumsfeld called on the Pentagon to create a centralized point in the Department of Defense to work on energy conservation, citing our current energy situation as a matter of national security.

In a recent briefing given to me by Admiral Donald, Director of Naval Nuclear Propulsion, he stated that the life cycle cost efficiency lines have already crossed for our large deck amphibious ships to go nuclear, and that when crude oil reaches $205 dollars a barrel, those lines will cross for our surface combatants – and the International Energy Agency agrees oil will eventually reach over $200 dollars a barrel.

We must look for ways to break ourselves free from dependency on foreign oil, and I would like to know why we are not moving towards an all nuclear Navy.

The subcommittee understands the Navy is currently emphasizing electric propulsion to improve the efficiency and operation of its surface ships and submarines. Most notably, the subcommittee is aware that the Navy's original choice for DD(X) propulsion was the Permanent Magnet Motor, or P M M. During testing of

the P M M, technical difficulties were experienced and the Navy hastily decided to switch to the program's back-up solution, the Advanced Induction Motor, or A I M.

Looking back, the fiscal year 1999 Senate Appropriations Committee Report directed the former Secretary of the Navy, the Honorable Richard Danzig, to provide a report which evaluated the installation of a common integrated electric drive system for DD-21, now DD(X). The Navy reported that the Induction Motor Technology did not meet future acoustic goals, was too large, and not a cost effective solution…while the Permanent Magnet Motor, did in fact, meet the Navy's acoustic goals, took up less displacement, and was more cost effective.

Here we are 7 years later, and the Navy has regressed to implementing the very same technology they said in 1999 cost too much, weighed too much, and didn't meet acoustic requirements.

In an analysis provided to me last week, completed in May 2005 by the DD(X) program offices of the Navy and Northrop Grumman, the same logic applies today as it did in 1999.

Here are just a few examples from that analysis:

- DD(X) designers had to increase the ships overall displacement to allow room for the larger and heavier Advanced Induction Motor.
- The power efficiency comparison overall weighs in favor of the Permanent Magnet Motor…especially at reduced power levels where the ship would spend most of its operations
- Generator Voltage produced by the A I M's motor produces only one third the amount of voltage the P M M produces. By choosing the A I M, this adversely impacts the ship's design and requires more than three times the amount of cables.
- Acoustically, A I M requires a separate controller to be developed to meet the ship's acoustic requirements, whereas the P M M still meets the acoustic requirement as it did 7 years ago, but needs no extra equipment.

I could go on and on. The Navy had it right in 1999…but now the Navy appears to have gone backwards in time by reverting to the A I M technology that is over two decades old.

Given that P M M's technical issues were quickly resolved after the initial setback, the subcommittee will be interested to learn why the Navy is not planning to test the more cost efficient, more energy efficient, Permanent Magnet Motor for implementation into DD(X).

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